Chapter 5
Responding to Feedback

This chapter offers methods to analyze and present the data received under a feedback and measurement effort so that meaningful results can be determined and acted upon.

Now that you've collected customer feedback, you need to understand the data and respond appropriately to what the data is telling you. So:

✔ **ANALYZE** the data

✔ **ACT** on the results

ANALYZE THE DATA

Figure 4.2 in Chapter 4 described the steps you should take for establishing the purposes of customer feedback. These steps included preparing an analysis plan and identifying the products your feedback project would produce. However, you can modify your framework for analyzing findings at any time. Your analysis plan should specify how your organization will analyze the survey responses to produce the desired products. This plan ensures that your data will answer the overarching questions being posed, and that you do not gather extraneous data. It also sets expectations about the kinds of information that will result from customer feedback.

Your analysis plan should: (1) designate the dependent and independent variables and (2) identify the unit of analysis. *Dependent* variables are the phenomena you are investigating. In this case, the dependent variable probably will be the degree of customer satisfaction with a specific product or service. *Independent* variables help explain the dependent variable data you collect. For example, they may include differences in the product or service provided (e.g., customers were consistently more satisfied with one service than with another), variety in the frequency and type of interaction, or differences among customers (e.g., educators, students, local planners and small business owners). The *unit of analysis* is what you are studying. In customer feedback surveys, the unit of analysis will, in most cases, be the individual person served. When you use continuous feedback methods, the unit of analysis will generally be the individual customer transaction.

Data Clean-up

Once you have set up the database and entered all data, you must review the data and prepare it for analysis. This may involve several activities, such as deleting cases that left all answers blank on a mail survey and coding open-ended responses into categories. Generally, this is the time to run a set of frequencies to show the number of yes and no responses to each question and the total number of responses of all kinds to each question. This quick analysis gives you a rough check on the completeness and accuracy of your data (the total number of responses to any one question cannot exceed the total number of respondents and will rarely differ greatly from the total responses for each of the other questions). Frequencies flag out-of-range values (i.e., responses to one question that are so different from responses to similar questions that you doubt their accuracy).

Types of Data and Analyses

Data from focus groups tend to be qualitative in nature. Analysts may tabulate data from focus groups, such as "X percent of the participants expressed satisfaction." You should treat these numbers cautiously and not generalize them to the full set of customers because focus groups usually have a small number of participants who may have been recruited because they had specific experiences or characteristics. You may review transcripts from focus groups to detect patterns and inconsistencies or you may apply more rigorous content analysis.

For mail and telephone surveys, you can produce a variety of statistics:

- Descriptions of central tendencies, such as the mean (the average value), median (the middle value - half are larger and half are smaller), or mode (the most frequently occurring value).

- Other descriptive statistics, such as frequencies, percentiles, and percentages. In customer satisfaction surveys, the most commonly reported result is the percentage of respondents who expressed satisfaction with a specific aspect of their interaction with your organization.

- Cross-tabulations that array independent variables against the dependent variable (for example, type of customer displayed against a summary measure of customer satisfaction, such as the percentage of customers of each type who reported being satisfied with the product or service they received).

- Multi-variate statistics—such as factor analysis, analysis of variance, and regression analysis—to determine the relationship between and among selected variables.

- Chi-square, z scores, t-tests, and other statistics to determine statistical significance.

- Time-series and trend analyses to determine long-term changes, seasonal, and cyclical patterns in the data.

In most cases, focusing on bullet items 2 and 3 above will meet all your needs and expectations.

Analysis: An Example

The following example demonstrates how you might analyze data from customer feedback. Suppose your organization has distributed several thousand copies of the ABC Booklet, and you asked a sample of 450 customers this question:

> *On a scale of **1 to 6** where 1 represents "highly dissatisfied" and 6 represents "highly satisfied," how would you rate your satisfaction with the ABC booklet you received from our organization?*

The most straightforward way to analyze the responses is to provide the average score, which in this case is 3.5. Although an average score is a very important piece of information, you can do a lot more with the data from your customers. You might begin with a frequency distribution, where you determine the number and percentage of respondents who gave each score between 1 and 6. Here is one way to present that distribution:

Customer Satisfaction with the ABC Booklet (n = 450)		
Score	Number	Percent of those expressing an opinion
1—highly dissatisfied	**42**	**11**
2	**27**	**7**
3	**122**	**31**
4	**132**	**34**
5	**38**	**9**
6 —highly satisfied	**32**	**8**
Total	**393**	**100**

don't remember receiving the ABC Booklet: 22 (5 percent of 450)
don't know/no opinion 35 (8 percent of 450)

This example points out several items you need to consider.

First, of the 450 customers asked this question, 22 did not remember receiving the booklet and 35 said they had no opinion or did not know. We presented this information outside the table because the analyst decided it was more important to focus attention on those who did have opinions. Thus, the percentages of those with opinions is based on the 393 respondents who expressed them. If it is important to determine the percentage of customers who don't remember or who have no opinion, you would calculate those figures using a denominator of 450—the total number who were asked the question. By including the sample size in the table ("n = 450"), readers can do these calculations, should they be interested.

Second, the information presented may be at too great a level of detail for many audience members. The difference between a "2" and a "3" rating, for example, may not be meaningful for them. Thus, you want to *collapse* the information into some smaller number of categories. One possibility is to create three categories: dissatisfied, neutral, and satisfied. Scores of 1 to 2, 3 to 4, and 5 to 6 might be collapsed to create three categories and then report:

Customer Satisfaction with the ABC Booklet (n =450)		
Rating	**Number**	**Percent of those expressing an opinion**
dissatisfied	**69**	**18**
neutral	**254**	**65**
satisfied	**70**	**18**
Total	**393**	**101***

* Total is greater than 100 due to rounding

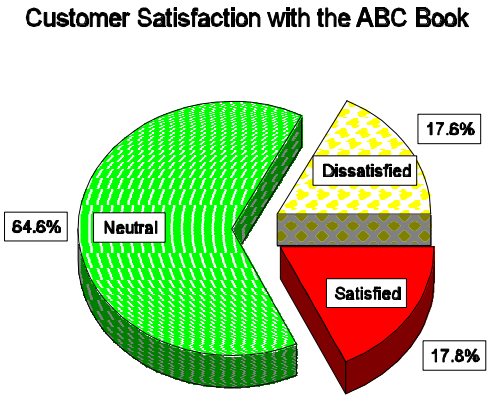
don't remember receiving the ABC Booklet: 22 (5 percent of 450)

don't know/no opinion 35 (8 percent of 450)

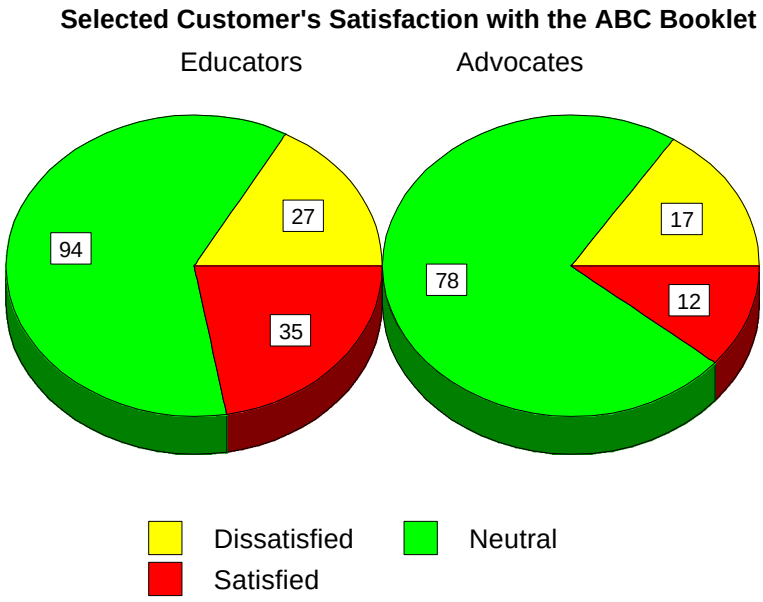
Note that the information can now be grasped much more immediately. It is reasonable to ask: If you will eventually collapse responses, why give customers six possible answers? Research has shown that people prefer to have a fairly wide range of responses because they don't like to be "forced" into a Procrustean set of options. In addition, analysts may have different approaches to collapsing categories.

The responsibility for making information manageable and understandable falls to the analyst. It is the analyst's task to identify sensible ways to collapse categories and to present these decisions to the audience (often as a footnote or technical appendix).

Third, as discussed in the next section, you should consider how to present the data. Although these tables are simple and easy to interpret, compare them to a chart that summarizes the information instantly.



Fourth, the analysis you anticipated during the planning phase should guide whether you need to do "subgroup analysis," which examines whether different kinds of customers have different kinds of responses. Suppose you want to examine whether educators and representatives of advocacy organizations have the same or different opinions about the ABC booklet. You could collapse categories and sort respondents by their status as educators or advocates (to be sure, some respondents may be both educators and advocates, but for simplicity, let's assume you had customers indicate their primary role). You might present the findings this way:



Selected Customers' Satisfaction with the ABC Booklet (n = 450)				
Rating	Educators		Advocates	
	Number	Percent	Number	Percent
dissatisfied	27	17	17	16
neutral	94	60	78	73
satisfied	35	22	12	11
Total	156	99*	107	100

* Total is less than 100 due to rounding

This table provides important information, but you might want to present it using charts for the two separate groups. You could also perform a statistical test to see if the two groups differ statistically in their satisfaction with the ABC Booklet.

Fifth, consider the adequacy of your findings. Be sure how strong your findings are before formulating recommendations. Many factors affect adequacy, such as the sample size, response rate, and objectivity of questions posed — as well as the way you will use the findings. With a sufficient sample size, a good response rate (more than 75 percent for mail and telephone surveys, for example), and questions that are not biased, you can use the information with confidence. OMB requires an 80 percent response rate for survey results to be considered statistically valid. However, when less than 80 percent of those sampled return questionnaires, the information gathered should still be used

to improve customer service. Do not ignore the findings.

Let's say that in the above example, an additional 17 small business owners responded to your survey. This small number may make the sampling error for this group quite high. Nevertheless, pay attention to the results.

Even if they do not adequately represent the larger group of small business owners who were your customers, you can still:

- Decide whether the findings are suggestive (rather than definitive). Should your office pay attention to the concerns suggested by these findings?
- Compare the findings to other similar data. Are small business owners generally pleased or displeased with other organization products?
- Compare the findings to information your organization gets from continuous feedback methods. If you call small business owners after providing a service or product, what do they have to say in those conversations?
- How do the continuous feedback findings compare with the results of this survey?
- Discuss the findings with colleagues. Have they gotten similar reports? Is there a pattern emerging about small business owners' level of satisfaction with your organization's products?
- Raise the findings with program managers, being careful to note that this *might* be an area that requires attention to improve customers' satisfaction with your organization.
- Investigate the findings further. Should you use this as a starting point for more in-depth discussions with small business owners? Should you conduct focus groups to see how products could produce higher levels of satisfaction?

One final comment on this example. Your organization may have customer bases much smaller than the thousands used in the example. If your customer base is quite small, you should decide whether a statistical sample and quantitative survey is viable, since other techniques may be more suited for your purposes. If you decide to go ahead with a quantitative survey, recognize that the analyses you conduct should be carefully considered and constructed. If, for instance, you have 500 customers and survey 100 of them, you can perform the same analyses as in the example above, but you should examine the frequency distribution first. In an extreme case, let's assume that 10 of your 100 respondents gave a score of "0," 60 gave a score of "3," and 30 gave a score of "6." Although the average score of 3.0 may be close to the average of 3.5 in the example, the distribution of responses is very different.

Sixth, you need to consider how past responses compare with the new responses, and ensure that you can compare the most current results with those you expect from future questionnaires. This is time series or trends analysis and is vital to measuring change.

Driver Analysis

One useful approach in customer research is *driver analysis*, which identifies the service or services that most significantly affect respondents' satisfaction. Driver analysis can help you prioritize findings, which is important because customer feedback efforts often yield more information than an organization can deal with. Also, managers often don't have enough resources to adequately improve all areas receiving low satisfaction ratings. Driver analysis enables you to identify which areas deserve the highest levels of attention.

As an example, let's assume that you are assessing three ways of providing information: by telephone, by mail, and through published materials. By analyzing customer feedback, you can identify which method results in the highest satisfaction rates. This is the delivery system that most strongly "drives" satisfaction with the program's information services. When you identify the method that significantly affects satisfaction, additional analysis can determine which factor within that method most significantly affects satisfaction. Continuing with the example, let's assume that you identify "information received by telephone" as the method producing highest satisfaction. Digging down another level, you can use driver analysis to identify the factor that most affects the respondent's opinion. Such factors may include: the accuracy of the information, the courtesy shown by the employee, or the accessibility of the correct person to answer the question. Identifying the driver in this way greatly enhances a manager's ability to set priorities for improvements.

You will use two primary analytical techniques, *stated importance* and *derived importance*, in driver analysis:

Stated importance uses respondents' answers to specific questions regarding the importance of the services. Simply ask the respondent to rank or rate items on a prescribed scale (as from 1 to 6) according to their importance.

Derived importance uses multi-variate analysis to identify the most important factors affecting satisfaction. In short, the overall level of satisfaction with the organization is compared to satisfaction levels of particular products or services received. Driver analysis will identify the degree to which variation in the overall level of satisfaction is explained by the variation in the product or service received. Those individual products or services that most adequately explain the variation in overall satisfaction are the drivers.

Presenting the Data

Before presenting the data, you must remove all identifying information. To ensure credibility and confidentiality, you should never present findings that could be used to identify a specific customer. Typically, you would strip names, addresses, and telephone numbers from the analytical database and keep them in a separate file that includes the unique identification number assigned during data collection. If ever warranted, you can link the file with identifying information through the identification numbers.

Most people want the "bottom line," presented as succinctly and clearly as possible. Therefore, consider presenting your survey results in simple, straightforward ways to most audiences, saving the mathematical details for an appendix or supplementary briefing. Many audience members want a brief summary of the study's findings. Two pages of text, with key findings presented as bullets, are usually sufficient.

Color bar graphs, pie charts and other illustrations can display your findings in a powerful way, making it easy for your audience to grasp information.

Making Recommendations Based on the Data

Your customers may suggest many potential improvements or enhancements to your permitting program. You probably should reduce the list to those that will most directly affect overall customer satisfaction. Most organizations have limited staff and other resources, so practical considerations must guide their choices. Usually, three to five targeted improvements are sufficient. Sometimes, a single improvement can have a major impact.

You will have to consider your organization's own capacity for action. However, it is important to do something. Otherwise, customers may feel that they wasted time providing input that you didn't value.

Recognize too, that not everyone will be ready for the feedback results. Presenting them can raise sensitive issues within your organization. Some co-workers may feel threatened by anything but glowing results. Some may question the credibility of the findings, especially if they build logically to recommendations for changes that affect them.

To get buy-in and use the results to influence change, results must be honest, and presented in a constructive way that emphasizes the positives. Results, findings and recommendations should be presented as opportunities for improvement. If the survey cannot be used to influence change or improvement, it did not meet its objective, no matter how carefully the feedback activity was conducted.

Presenting Recommendations - Using Graphics

Remember, at least 70 percent of your message is visual, so take advantage of how people absorb information. Use the right visuals to communicate your message.

- emphasize main numerical facts
- uncover facts, trends, comparisons and relationships that might be overlooked in text or table
- summarize, group or segment (stratify) data
- add variety and interest to text, tables and briefings

It's best to use *pie* charts to display components or parts of a whole. Use *line* charts if you want to show independent or cumulative values when:

- your data cover a long period of time and several series are compared on one chart
- you want to show change, not quantity
- to exhibit trends
- to show relationships

Do not use column charts for comparing several data sets, for showing data with many plottings, or to show many components. Finally, use picture graphs to demonstrate concepts or ideas.

ACT ON THE RESULTS

Is this the beginning or the end of the process?

When your efforts to collect customer data appear to be coming to a close, your real work may just be starting! If this is the first time your organization has collected and analyzed customer data systematically, you are probably discovering a whole new world of information. Depending on the feedback method you have chosen, you may have created a *baseline* of information that characterizes how your customers evaluate your products and services. You may wish to repeat the same process again, to measure improvements against the baseline.

Customers will expect you to not only act on their feedback, but also to tell them what you have done. At the same time, your organization will want to make the best use of the information it paid to collect. Therefore, this next stage of the process is vitally important to the success of the final phase–action planning and implementation.

How do you decide what to do with the feedback you receive?

Once you receive and analyze the feedback, most people will be anxious to know the results. *How did we do? What's the bottom line?* Work hard to avoid giving answers that over-simplify the feedback you have received. Depending on the methodology you used, you may have an average score or rating to report. However, your information probably will provide a wealth of additional insights about how your customers view the products and services they have received from your organization.

How good is good enough?

That is a very hard question to answer. In fact, the only real way to answer it is to say "it depends." For example, is an average score of 4.9 on a 6-point scale a good score? If last year's average score was 2.5, you may have reason to celebrate. For one thing, your score nearly doubled. Even better, it leaped from the dissatisfied range to the middle of the satisfied range. However, you may want to look deeper: how do your customers rate others who provide similar services? Is that organization getting ratings above or below the 4.9? And what about the distribution of ratings—are some

customers still rating you below a 3.0 while some are rating you above a 5.5? Are the more positive ratings obscuring the negative ones? If so, you still may have customers out there who are sharply critical of your products and services.

Setting acceptable goals for customer satisfaction ratings is a decision that each organization must make for itself. Keep in mind, however, that leading service organizations:

- Target overall satisfaction scores at the upper end of the scale. On a 6 point scale, that should be a 5.0, and in very competitive environs it may even be at the 5.5 level or higher.

- View any less-than-satisfied ratings as being unacceptable because they indicate an opportunity for dissatisfied customers to quickly convey their dissatisfaction by word of mouth. In the long run, that can undermine your efforts to achieve a reputation for service and product excellence.

How do we know what to work on first?

Many organizations are overwhelmed with the amount of information they receive from customers. This is especially true if a survey instrument is lengthy, or if the results contain many open-ended comments and ideas. Decision makers, particularly at more senior executive levels, are likely to ask: What do we do first? What improvements will yield the best improvement in overall customer satisfaction? What investments are worth making?

During the planning phase, you, your colleagues, and managers will have identified potential methods and procedures for acting on the results of customer feedback activities.

Recovery. Be prepared to hear from customers who report a negative experience with your organization. Set up a quick alert and response mechanism for any such case. (That may require a special question asking whether the respondent is willing to be identified and contacted for follow-up.) A quick response is a very positive way to convert a negative impression into a positive one.

Report. Even if the primary means for action is an oral briefing, having written documentation for others to read and refer to is a good idea. It also creates a historical record for tracking changes over time. Most people will want to see graphics and summary tables. Reports may include an executive summary, a description of the study objectives and data collection methods, a comprehensive investigation of findings (illustrated with graphs and tables), and conclusions and recommendations. To keep the report at a reasonable length, you can present supplementary material in appendices.

Brief. Action planning workshops get management's attention. Gather decision makers together and go over the findings with a verbal presentation. Software graphics packages can help make the briefing interesting and informative. Conducting a dry run before your presentation helps with timing, pacing, and finding out how well you can verbally communicate your written findings. Hard-copy handouts give participants a tangible reminder of the information conveyed.

Prioritize. Try to package the information so that it leads the audience or reader to a series of practical actions that fit logically. Acting on results may be more successful if several smaller action plans are developed that contain three to five steps, rather than one large plan that may appear overwhelming.

Communicate. In addition to briefing management, it is a good idea to communicate results to others. Sending a thank-you letter to focus group participants and customers should note what your organization learned and what will be done with the findings. Your employees are often eager to learn what customers have said, so results should be summarized and distributed widely.

Improve. There is no reason to elicit customer feedback unless you will use the information to improve your organization's processes, services, or products. Recognize that some employees may be excited about possible changes, yet others threatened and resistant. The best way to use customer feedback may be to develop and define action plans. They are most likely to be successful when "owners" of each issue:

- are identified and included
- help assess their activities and customers' feedback
- participate in review and strategy sessions
- have an opportunity to discuss concerns and shortcomings in nonthreatening, non-confrontational environs.

Enhance. Sometimes customers are satisfied, but want the agency to do more. This must be seen as an opportunity to enhance products or services.

Reward. Conducting customer feedback activities can be exciting and worthwhile; the process can also be exhausting and threatening. Be certain that you recognize and reward the efforts of staff and customers who made the activity possible. Rewards can take the form of public acknowledgment, mention in performance reviews, and attention to findings.

Plan. Use customer feedback to see what worked well and what could be improved the next time around. Identify aspects that facilitated or impeded achieving the project's objectives, including aspects of planning, data collection, analysis, and development of findings.

Feed Results into the Strategic Plan and GPRA Goals and Planning Activities. Recent management initiatives, including the President's directives on strategic planning, reinvention, and customer service improvement, and the Government Performance and Results Act (GPRA), suggest that customer data be included in performance data. To address these needs, quantitative data from surveys and trend data accumulated from on-going feedback mechanisms may be most useful. You

can use focus groups and other qualitative data to clarify customers' views.

As government agencies go about "reinventing" programs to meet customers' needs and expectations and to comply with the requirements of GPRA, managers will need to develop customer-based performance goals and indicators to assess progress. The basic way to do this is to get input directly from customers.